

DOCUMENT RESUME

ED 341 216

EC 300 891

AUTHOR Seal, Brenda C.
TITLE Observer Agreement on Judgments of Bilingualism in Deaf Children.
PUB DATE 25 Nov 91
NOTE 12p.; Paper presented at the Annual Convention of the American Speech-Language-Hearing Association (Atlanta, GA, November 22-25, 1991).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *American Sign Language; *Bilingualism; Bilingual Students; *Deafness; Elementary Secondary Education; *Interrater Reliability; Language Dominance; Manual Communication; *Observation; *Sign Language; Teaching Experience
IDENTIFIERS Disabled Teachers; Pidgin Signed English

ABSTRACT

In order to better evaluate bilingualism in deaf children, this study examined whether observers (N=37) from different backgrounds would agree on deaf children's use of either American Sign Language (ASL) or English signing. Observers represented a range of background experience in a variety of schools and programs; 6 were deaf; 31 were hearing; 10 identified themselves as primarily ASL signers; and 27 as primarily Pidgin Sign English users. Observers viewed a videotape and decided whether the child signer was using ASL or English signing. Judgments were compared to those of a panel of sign language specialists. General results indicated no significant differences among observers at different levels of experience nor between deaf and hearing observers. However, the average score of deaf observers was significantly higher than that of hearing observers in identifying one child using ASL. Observers made their judgments predominantly on the basis of language use rather than structure or content. Results suggest that professionals working with deaf children cannot reliably distinguish between ASL and English signing and that years of experience with the deaf or being deaf oneself was of minimal assistance. Continued study of differences and similarities in ASL and English signing is recommended. Includes 29 references. (DB)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED341216

- ☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

OBSERVER AGREEMENT ON JUDGMENTS OF BILINGUALISM
IN DEAF CHILDREN

Brenda C. Seal
James Madison University
Harrisonburg, Virginia

ASHA Annual Convention
Atlanta, Georgia
November 25, 1991

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Brenda Seal

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

EC 300891

Recent focus on bilingual education of deaf children raises issues of differences between American Sign Language (ASL) and English signing (ES). Empirical evidence on observed differences among deaf children of ASL families and English signing families is limited. We do not know if young deaf children exposed to ASL in their home environments and English signing in their school environments acquire two distinctly different languages. We do not know if these children are likely to demonstrate bilingualism in their spontaneous with other deaf children or if one sign language or system is more likely to be used than another. We do not know if features from ASL and English are likely to be mixed (Maxwell, 1990). We also do not know if professionals can identify bilingualism when and if it is demonstrated in young deaf children. From both a practical and theoretical perspective, the ability to identify the language or languages that a child uses is critical to discussion of bilingualism. The purpose of this study was to determine whether observers of different backgrounds would agree on children's use of ASL and English signing, when the observers viewed videotaped samples of deaf children's conversation. The research questions included the following:

1. Is there a difference among observer judgments of ASL and English signing in deaf children according to years of experience in using sign language?
2. Is there a difference between hearing observers and deaf observers in judgments of ASL and English signing in deaf children?
3. What criteria are used by observers in distinguishing ASL and English signing in deaf children?

Method

Thirty-seven observers representing three state schools for the deaf, two university programs, two rehabilitation agencies, two public schools, and a state agency for the deaf and hard of hearing served as subjects. Six of the observers were deaf; 31 were hearing. Eleven of the observers had fewer than 10 years of experience in using sign language; 15 had more than 10 years but fewer than 20 years of experience; and 11 had more than 20 years of experience. Ten of the observers identified themselves as primarily ASL signers; 27 identified themselves as primarily Pidgin Sign English users.

The observers viewed a videotape that contained 5 conversations, each lasting about 3 minutes. The observers were informed that two of the four children involved in the conversations were from ASL homes, and that two were from homes where their parents used spoken English and English signing. The observers were given a response sheet that included the following questions:

1. Is child A using ASL or English signing with child B?
2. How did you come to this decision?
3. Is child B using ASL or English signing with child A?
4. How did you come to this decision?

Five additional observers, specialists in sign language, were also shown the videotape. They were asked to participate in the project as criterion judges. Their judgments, when agreement was 80% or better, were considered the expected judgments to which the other 37 observers' judgments were compared. An observer who responded as expected, therefore,

scored 100. Any deviation from the expected response reduced the score by 16 points. (Agreement rates for the 5 criterion judges was 80% on only 6 of the possible 10 judgments; only those 6 judgments were scored for the other observers.)

Scores of the 11 observers with fewer than 10 years of experience in using sign language were compared to scores of 11 observers selected at random from the 15 reporting 11 to 19 years of experience and to the 11 observers reporting greater than 20 years of experience. Scores of the 6 deaf observers were compared to 6 hearing observers selected at random from the pool of 31. Finally, each of the narrative responses were coded as a "structure," "content," or "use" (Bloom & Lahey, 1978) statement. The codings were matched by a certified speech-language pathologist at a school for the deaf; agreement was high ($r = .99$) between the author's coding and the second speech-language pathologist's coding.

Results

General results indicated lower scores among the 37 observers reported their roles as teachers of deaf children, teachers of sign language, and educational interpreters (with a range of 33 to 100%) than among the criterion judges (with a range of 80 to 100% on the selected items). Individual scores for the observers at different levels of experience were not statistically different ($F(2,30) = .66, p > .05$). Similarly, the scores for the deaf observers were not statistically different from the scores of the selected hearing observers ($F(1, 10) = .635, p > .05$). When the conversations were analyzed individually, however, the average score of the deaf observers was significantly higher than that of the

hearing observers in identifying the ASL child in conversation 2; (χ^2 (1, $N = 37$) = 9.03, $p > .05$). No other differences were found.

Analysis of the narrative responses indicated that the majority of responses (57%) provided by the observers in distinguishing ASL from English signing focused on language use. Only 14% of the responses focused on the children's content; and 29% focused on their structure. Interestingly, however, the majority of responses (50%) written by observers who disagreed from the criterion judges in identifying a child as an ASL or English signing user, focused on structure; only 27% of their responses dealt with use and 23% with content.

Discussion

Discussion of these results can be approached from two perspectives: one focuses on the subjects or observers; the other focuses on the stimulus or the children observed. Advocates of bilingual education argue that ASL is the cultural right of all deaf children. The results of this study do not challenge the merits of this argument but do raise questions as to an assumption underlying the argument: namely, that professionals working with deaf children can distinguish between ASL and English signing in children's communication. Results of this study do not support such an ability in observers. Approximately 60% of the 37 observers agreed with the criterion judges in identifying the ASL and English signing in the children, and this agreement was based on only 6 of 10 questions in which the criterion judges had 80 to 100% agreement. Additionally, observers with more years of experience were no more "accurate" in identifying a child's language than observers with fewer years of experience. Deaf observers were generally

no more accurate in identifying the child's language than observers who hear. In one case, however, a conversation involving the oldest of the four children, there was a statistically significant difference between the deaf observers and the hearing observers in identifying ASL.

Discussion of bilingualism also suggests that an observable dichotomy exists between ASL and English signing. To date, research into observer identification of ASL and English signing has not supported a clear dichotomy. Children exposed to ASL in their home environments and to English in their school environments are not readily identified as using either ASL or English signing, even when paired with children likely to elicit only one of the languages. Features from both ASL and English signing are apparently present in the spontaneous sign language demonstrated by these young children. "Language mixing" (Maxwell, 1990), then, may operate to prevent observers from making clearly distinguishable judgments.

Additional interpretation of the results involves analysis of the narrative responses. Because the observers who provided written explanations with their judgments attended more to language use than to structure and content, it is possible that the distinguishing features of ASL and English signing are pragmatic features. A child who refers to first person with an initialized "I," for example, may also demonstrate ASL in spatial manipulations, nonverbal facial expressions and postural shifts (use). An observer who focuses only on the initialized sign (content) may be blinded from seeing the child's demonstrated ASL. Training professionals who work with deaf children to focus on pragmatic skills should lead to improved knowledge in this pioneer territory. Without such training, and without continued study of the differences and similarities in ASL and English signing, advocacy of bilingualism as an end is advocacy without a means.

Comparison of observer judgments by years of experience
in using sign language:

1 to 10 years	11 to 19 years	more than 20 years
50	100	100
50	67	33
50	67	50
100	33	83
25	83	50
80	50	83
40	100	67
83	83	67
0	83	100
83	67	33
100	67	67
$\bar{X} = 69.9$	$\bar{X} = 72.7$	$\bar{X} = 66.6$

$$F(2, 30) = .66, p > .05$$

Comparison of observer judgments by hearing status:

Hearing Observers	Deaf Observers
40	83
83	80
60	100
83	67
100	67
33	67
$\bar{X} = 66.5$	$\bar{X} = 77.3$

$$F(1, 10) = .635, p > .05$$

Narrative Responses by Type:

Conversation	Structure	Use	Content
1 (ASL ₁)	4	19	1
2 (ASL ₂)	18	22	9
3 (ES ₂)	21	20	5
4 (ES ₂)	11	9	7
5 (ES ₂)	3	29	4
5 (ASL ₂)	6	26	5
	29%	57%	14%

Examples of narrative responses coded by type:

Structure: "no endings"
 "sentence structure is broken"
 "used English markers"
 "sign order"

Use: "her command of ASL behaviors"
 "expressions and body shifts"
 "repetition of phrase"
 "facial expressions"

Content: "used 'I'"
 "initialized signs"
 "use of classifiers"
 "ASL idioms"

References

- Bloom, L. & Lahey, M. (1978). Language development and language disorders. New York: John Wiley & Sons.
- Brodesky, R. & Cohen, H. (1988). The American Sign Language/English studies project: A progress report. American Annals of the Deaf, 133, 330-335.
- Clements, A. & Prickett, H. (1986). American Sign Language in education of the deaf. American Annals of the Deaf, 132, 218-19.
- Cokely, D. (1983). When is a pidgin not a pidgin? An alternate analysis of the ASL-English contact situation. Sign Language Studies, 38, 1-24.
- Commission on Education of the Deaf. (1988). Education of the Deaf. Report to the United States Congress. Washington, D. C.
- Eagney, P. (1987). ASL? English? which? comparing comprehension. American Annals of the Deaf, 132, 272-275.
- Ferguson, G. (1981). Statistical analysis in psychology and education, 5th ed. New York: McGraw-Hill Book Company.
- Grosjean, F. (1982). Life with two languages: An introduction to bilingualism. Cambridge: Harvard University Press.
- Gustason, G. (1979). The dynamics and interaction of ASL and new signs. In F. Caccamise & G. Gustason (Eds.), Manual of communication instructional programs in the educational setting. Washington D.C.: Gallaudet College.
- Johnson, R., Liddle, S., & Erting, C. (1989). Unlocking the curriculum: Principles for achieving access in deaf education. Working Paper 89-3. Washington, D.C.: Gallaudet Research Institute.
- Jordan, I., Gustason, G., & Rosen, R. (1979). An update on communication trends in programs for the deaf. American Annals for the Deaf, 124, 350-357.
- Kratochwill, T. & Wetzel, R. (1977). Observer agreement, credibility, and judgement: Some considerations in presenting observer agreement data. Journal of Applied Behavior Analysis, 10, 133-139.
- Lee, D. (1982). Are there really signs of diglossia? Re-examining the situation. Sign Language Studies, 35, 127-152.
- Livingston, S. (1983). Levels of development in the language of deaf children: ASL grammatical processes, Signed English structures, and semantic features. Sign Language Studies, 40,

- 193-285.
- Lucas, C. & Valli, C. (1989). Language contact in the American Deaf community. In C. Lucas (Ed.), The sociolinguistics of the Deaf community. San Diego: Academic Press, Inc.
- Lucas, C. & Valli, C. (1990). ASL, English and contact signing. In C. Lucas (Ed.), Sociolinguistics of sign language. Silver Spring: Linstok Press.
- Luetke-Stahlman, B. (1983). Using bilingual instructional models in teaching hearing-impaired students. American Annals of the Deaf, 128, 873-877.
- Luetke-Stahlman, B. (1990). Can SEE-2 children understand ASL-using adults? American Annals of the Deaf, 135, 7-8.
- Luetke-Stahlman, B. & Luckner, J. (1991). Effectively educating students with hearing impairments. White Plains: Longman.
- Maxwell, M. (1983). Simultaneous communication in the classroom: What do deaf children learn? Sign Language Studies, 39, 95-111.
- Maxwell, M. (1990). Simultaneous communication: The state of the art proposals for change. Sign Language Studies, 69, 333-390.
- Markowicz, H. (1980). Some sociolinguistic considerations of ASL. In W. Stokoe (Ed.), Sign and culture: A reader for students of American Sign Language. Silver Spring: Linstok Press.
- Meadow, K. (1980). Deafness and child development. Berkeley: University of California Press.
- Stewart, D. (1983). Bilingual education: teachers' opinions of signs. Sign Language Studies, 39, 145-167.
- Stewart, D. (1990). Rationale and strategies for American Sign Language intervention. American Annals of the Deaf, 135, 265-270.
- Stokoe, W. (1980). The study and use of sign language. Studies in Sign Linguistics, 21, 27-41.
- Suty, K. & Friel-Patti, S. (1982). Looking beyond Signed English to describe the language of two deaf children. Sign Language Studies, 35, 153-168.
- Woodward, J. (1978). Historical bases of American Sign Language. In P. Siple (Ed.), Understanding language through sign language research. New York: Academic Press.
- Woodward, J. (1973). Some characteristic of Pidgin Sign English. Sign Language Studies, 3, 39-46.

Acknowledgments

Special thanks are extended to Gerilee Gustason, Val Dively, Clayton Valli, Brenda Mitchiner, and Marie Griffin for their roles as criterion judges; to John Bonvillian for his support and guidance; and to the observers who generously gave of their time and expertise.